IN THE SPECIFICATION

Please amend the specification as follows:

Amend the paragraph at page 7, line 8 as follows.

A1

Figure 1 depicts a widely-tunable, four-section SG-DBR laser 10 that makes use of two multi-peaked DBR mirror 12, 14, which are formed and configured in accordance with the present invention, to achieve an extended tuning range. Currents are applied to the various electrodes to provide a desired output optical power and wavelength as discussed in US Patent #4,896,325. As described therein, a current to the gain section 16 creates light and provides gain to overcome losses in the laser cavity; currents to the two differing SG-DBR wavelength-selective mirrors 12, 14 are used to tune a net low-loss window across a wide wavelength range to select a given mode; and a current to a phase section 18 provides for a fine tuning of the mode wavelength. It should also be understood that the sections 12, 14, 16, 18 are somewhat interactive, so that currents to any will have some effect on the parameters controlled by the others.

Please insert at page 7, line 4 the following new paragraph:

A2

Fig. 9 illustrates a method for configuring a selected grating distributed Bragg reflector for use in a laser having an output comprising at least one wavelength within a specific region of bandwidth.

Insert at page 9, line 9, the following new paragraph:

A3

Fig. 9 illustrates a method 900 for configuring a selected grating distributed Bragg reflector for use in a laser having an output comprising at least one wavelength within a specific region of bandwidth. The method comprises the steps of: a) selecting a preferred tuning range for said reflector at block 902; b) determining an average κ for the at least one output wavelength of the specific region of the bandwidth that is to be used at block 904; and c) generating a sampling function that, when applied to the reflector, results in the closest fit to the desired average κ with the smallest amount of variation within the preferred tuning range at block 906.

Amend the paragraph beginning at page 8, line 16, as follows:

A4

Another sampling function is shown in Figure 6. Reversing the phase of the grating at the beginning and end of each sample can be used to tailor the peak envelope to allow for higher kappa over a larger range. Figures 7a and 7b illustrate an example of the peak envelopes that would result from the modification discussed in Figure 6, showing that the modification produces the intended effect: a mirror with a wider wavelength range and with a larger κ throughout.